JCM 132 All Stainless Steel Extended Range Universal Clamp Couplings

JCM 132 Extended Range All Stainless Universal Clamp Coupling - Double/Multi-Band
JCM 132 Extended Range All Stainless Steel Universal Clamp Couplings are designed especially for systems with both asbestos-cement and cast iron pipe, or with oversized pipe. This extended range, multi-band clamp provides a full circumferential seal and extra wide range. Only 6 clamps are needed to fit all cast-iron and asbestos-cement pressure pipe in sizes 4” through 12”. Extra range and safety factor make this clamp particularly suited for pipe sizes 10” and larger. All stainless steel construction makes the 132 All Stainless Steel Clamps corrosion resistant and ideal for use in corrosive environments.

JCM 132 All Stainless Extended Range/Multi-Band clamps are designed to accommodate the working characteristics of large diameter pipe, especially in hot or acidic soils. In the repair applications to large diameter pipe, there are several factors to be considered to maintain pipe integrity and return to 100% service capacity. Factors which are critical to the application include: size and type of pipe, severity of damage, working pressure or service requirements, location or repair and time factor. JCM 132 All Stainless UCC Design criteria accommodate these factors by providing the following strength features...

Heavy Duty Lug - and positive fastener attachment provides the safety factor and solid platform to support the increased bolt torque levels required to compress the gasket and seal the damaged area.

Large Bolts - supply bolting power and high torque ability to fully contract the full circumferential gasket.

Thick Stainless Steel Band - increases pressure holding capability and provides even, consistent compression over the gasket area.

JCM 132 All Stainless Steel Extended Range Universal Clamp Couplings

Double Band Clamps

NOM. PIPE SIZE (IN.)	CLAMP O.D. RANGE (IN.)	WIDTH	CLAMP NUMBER	APPR. WT. EA. (LBS.)
4	4.44 - 5.24	6 7-1/2 12 15 18 30	132-0450- 6 132-0450- 7 132-0450-12 132-0450-15 132-0450-18 132-0450-30	9 11 16 22 25 44
4	4.74 - 5.57	6 7-1/2 12 15 18 30	132-0480- 6 132-0480- 7 132-0480-12 132-0480-15 132-0480-18 132-0480-30	9 11 16 22 25 44
6	6.62 - 7.42	6 7-1/2 12 15 18 30	132-0663- 6 132-0663- 7 132-0663-12 132-0663-15 132-0663-18 132-0663-30	10 12 18 26 30 49
6	6.84 - 7.64	6 7-1/2 12 15 18 30	132-0690- 6 132-0690- 7 132-0690-12 132-0690-15 132-0690-18 132-0690-30	10 12 18 26 30 49
8	8.62 - 9.42	6 7-1/2 12 15 18 30	132-0863- 6 132-0863- 7 132-0863-12 132-0863-15 132-0863-18 132-0863-30	11 13 20 29 33 55
8	8.99 - 9.79	6 7-1/2 12 15 18 30	132-0905- 6 132-0905- 7 132-0905-12 132-0905-15 132-0905-18 132-0905-30	11 13 20 29 33 55
10	10.72 - 11.72	12 18 30	132-1075-12 132-1075-18 132-1075-30	32 48 80
10	11.04 - 12.24	12 18 30	132-1110-12 132-1110-18 132-1110-30	32 48 80
12	12.72 - 13.92	12 18 30	132-1275-12 132-1275-18 132-1275-30	34 51 85
12	13.14 - 14.34	12 18 30	132-1320-12 132-1320-18 132-1320-30	34 51 85
12	13.65 - 14.65	12 18 30	132-1365-12 132-1365-18 132-1365-30	34 51 85

Double Band Clamps

NOM. PIPE SIZE (IN.)	CLAMP O.D. RANGE (IN.)	WIDTH	CLAMP NUMBER	APPR. WT. EA. (LBS.)
14	15.20 - 16.20	12 18 30	132-1530-12 132-1530-18 132-1530-30	36 54 89
14 - 16	16.00 - 17.00	12 18 30	132-1600-12 132-1600-18 132-1600-30	36 54 90
16	17.20 - 18.20	12 18 30	132-1740-12 132-1740-18 132-1740-30	37 56 92
16 - 18	18.40 - 19.40	12 18 30	132-1846-12 132-1846-18 132-1846-30	39 59 97
18 - 20	19.40 - 20.40	12 18 30	132-1950-12 132-1950-18 132-1950-30	40 60 100
18 - 20	20.40 - 21.40	12 18 30	132-2050-12 132-2050-18 132-2050-30	41 62 103
20 - 22	21.40 - 22.40	12 18 30	132-2160-12 132-2160-18 132-2160-30	43 65 108
20 - 22	22.50 - 23.60	12 18 30	132-2260-12 132-2260-18 132-2260-30	45 67 111

Multi-Band Clamps

24	23.80 - 25.00	12 18 30	132-2400-12 132-2400-18 132-2400-30	54 80 133
24	25.50 - 26.70	12 18 30	132-2580-12 132-2580-18 132-2580-30	56 83 138
24	27.90 - 29.10	12 18 30	132-2800-12 132-2800-18 132-2800-30	59 88 146
24 - 30	29.80 - 31.00	12 18 30	132-3000-12 132-3000-18 132-3000-30	62 92 153
30	31.70 - 32.90	12 18 30	132-3200-12 132-3200-18 132-3200-30	64 95 158
36	37.85 - 39.20	12 18 30	132-3830-12 132-3830-18 132-3830-30	82 123 205

JCM 131 and 132 All Stainless Steel Universal Clamp Couplings Typical Specifications

JCM 131 All Stainless Universal Clamp Couplings - JCM 132 All Stainless Multi-Band Clamps (sizes through 8")

All full circumferential single and multi-band repair clamps 1-1/2" and larger shall have a minimum material standard of certifiable prime 304 stainless steel band and bolts; low profile CF-8 Cast Stainless Steel lugs - equivalent to 18-8 type 304 stainless steel, with mutually supporting sliding fingers and minimum 9/16"(11/16" clamps 10" and larger) replaceable 304 stainless steel bolts. The gasket shall be gridded with tapered lap joint ends and a 304 stainless steel quarter hardened bridge plate molded flush into the gasket. Gaskets in sizes 3” and larger shall be 1/4” thick.Clamps shall be similar to JCM 131 All Stainless Universal Clamp Coupling, JCM 132 All Stainless Clamp or approved equal.

JCM 132 All Stainless Multi-Band Clamps (sizes 10" and larger)

All full circumferential single and multi-band repair clamps 10" and larger shall have a minimum of 17 gauge certifiable prime 304 stainless steel band and bolts; CF-8 Cast Stainless Steel lugs with mutually supporting sliding fingers, replaceable 304 stainless steel bolts with an oval neck, a 1/4" thick gridded gasket with tapered ends and a 304 stainless steel quarter hardened bridge plate molded flush into the gasket. Length of clamps shall be 12" minimum. Lugs shall be heavy duty design providing a minimum range of 1/2" and shall have a minimum of 9/16" diameter bolts (sizes 4" through 8") and 11/16" (sizes 10" and larger) diameter bolts. Clamps shall be JCM 132 All Stainless Universal Clamp Coupling or approved equal.

JCM Series 130 All Stainless Steel Universal Clamp Couplings are ANSI/NSF Standard 61 Certified.

JCM All Stainless Steel Universal Clamp Couplings Material Specifications

JCM All Stainless Steel Universal Clamp Couplings - 131, 132, 133, 134

BAND: 18-8 Type 304 Stainless Steel

LUGS: CF-8 Cast Stainless Steel (equivalent to 18-8 Type 304 Stainless Steel)

BOLTS: 18-8 Type 304 Stainless Steel

GASKET: Compounded for use with water salt solutions, mild acids bases and sewage. Other gaskets available upon request.

TAPPED OUTLET (Models 133, 134):18-8 Type 304 Stainless Steel

JCM Stainless Steel Universal Clamp Couplings Installation Instructions Models 131, 132, 133, 134

131 STANDARD RANGE UNIVERSAL CLAMP COUPLING

- Clean pipe and place reference mark on pipe, back from break, to help in centering clamp over joint or damaged area.
- Place clamp on pipe and center over damaged area.
- Tuck tapered gasket in place, mesh finger lugs and rotate clamp in direction of arrow to smooth tapered gasket flap.
- Engage bolts and tighten finger tight to hold in place. Tighten bolts evenly to the following torque values:

NOMINAL PIPE SIZE	RECOMMENDED TORQUE
8” & Smaller	70 Ft/Lbs
10” & Larger	90 Ft/Lbs

132 EXTENDED RANGE UNIVERSAL CLAMP COUPLING

- Clean pipe and place reference mark on pipe, back from break, to help in centering clamp over joint or damaged area.
- Place clamp half without bolts on pipe so that gasket flap is on top facing you.
- Take half with bolts and turn gasket side up so that bolts slide back out of the way of fingers. Feed bottom tapered gasket end into place, mesh top lug fingers and engage top bolts.
- Rotate clamp in direction of arrow to smooth gasket flaps. Engage remaining bolts and tighten all bolts evenly to the recommended torque values.

  Note: Gaps between lugs should be approximately even on both sides.

INSTALLATION *“TRICKS OF THE TRADE”*

Years of field experience, special applications and product testing have revealed many subtleties regarding application and installation of repair clamps. For maximum performance under adverse conditions take advantage of the *“tricks of the trade”*.

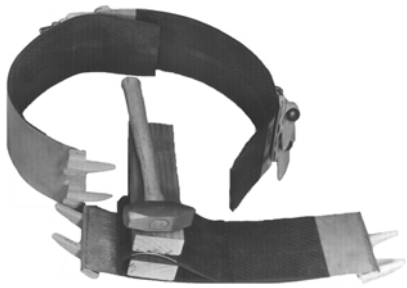
- Always clean and lubricate pipe with water or soap and water. It helps to overcome friction. Do not use pipe lubricant.
- Place a reference mark on pipe back from break to help in centering clamp over break.
- Where break involves deflected pipe, use “long” width clamp. Lugs will articulate, permitting clamp to better conform to pipe.
- Place stainless or galvanized metal over large holes (under repair clamp) to provide gasket something to seal against.
- Drill ends of split to relieve forces which could cause split to grow.
- Clamp performance drops when gap between pipe ends is larger that 1/2”. Use spacer to fill gap or metal to place over gap.
- Leaving enough pressure on broken line to prevent intrusion of foreign matter will help prevent line contamination.
- With pressure reduced, spraying water will cease as soon as water level rises above break.
- Lubricating clamp bolts will ease clamp installation and assure proper torquing of bolts.

JCM Industries, Inc. / P. O. Box 1220 / Nash, TX 75569-1220

JCM Stainless Steel Universal Clamp Couplings Installation Instructions Models 131, 132, 133, 134

MAKING LARGER CLAMP FROM SMALLER CLAMPS

Longer than normal gasket tapers permit joining of Universal Clamp Couplings of like width and type to make a larger clamp. For instance, a 6” and 8” clamp can be joined to make a 14” clamp. This provides you with “on hand” capability to make repairs on larger pipe sizes throughout your system.



- Determine which clamps are available to make needed clamp, usually 2 or 3 clamps are sufficient. It is recommended that clamps to be joined be not more than one nominal size apart. Join clamps with ranges that when combined include O.D. of pipe to be repaired. For EXAMPLE: Required is 14” clamp to fit 16.44 O.D. Combining a 131-0905-12 (Range 8.99 to 9.39) and a 131-0690-12 (Range 6.84 to 7.25) you make a clamp with a range of 15.84 - 16.64.

- Prior to joining clamps, reduce the curvature of the recessed bridge plate (as shown in photo) to slightly less than curvature of pipe to be repaired. This is done by laying bridge plate between two 2” x 4” ‘s and hitting with small sledge hammer.

- Install as multi-band clamp making sure to tighten bolts evenly keeping gaps between lugs approximately even.

WIDTH SELECTION - 131 & 132 UNIVERSAL CLAMP COUPLINGS

JCM Universal Clamp Couplings are available in a great many widths. Because these clamps utilize a heavier gasket and bolting arrangement than most comparable clamps, when you use JCM Universal Clamp Couplings significant savings are possible. The following general recommendations are offered to assist you in taking advantage of the design benefits of these clamps. Specific circumstance may require widths other than these general recommendations.

6” Width:	Best and most economical width to repair most beam breaks and to connect pipe in sizes 4” and smaller. Short length with thicker gasket give outstanding deflection capability. Recommend 2” of gasket on both sides of the break.
7-1/2” Width:	Best for Asbestos Cement coupling replacements, beam breaks and connection of pipe in sizes 6” and larger.
12” Width:	Best for longer breaks, repairs on working pressure above 150 PSI and for larger sizes of pipe.
15, 18, 24, 30” and longer widths:	Best for long splits and heavily damaged pipe. For best performance the separation between pipe ends should be no more than 1/2”. If the space is larger, or a large hole is being repaired, use a sheet of stainless steel over the hole under the gasket or a spacer to fill gap between pipe ends.

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